AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A lithium secondary battery comprising: a positive electrode including a positive electrode active material; a negative electrode including a negative electrode active material; and a non-aqueous electrolyte,

wherein said positive electrode active material comprises at least one lithium-containing composite oxide represented by the following general formula:

$$\text{Li}_{x}\text{M}^{1}_{1-y}\text{M}^{2}_{y}\text{O}_{2}$$

where M^1 and M^2 are different elements, M^1 [[is]] being Ni or Co, and M^2 [[is]] being at least one selected from Ni, Co, Mn, Mg, and Al, $1 \le x \le 1.05$, and $0 \le y \le 0.7$,

said negative electrode active material comprises at least one selected from the group consisting of silicon, tin, a silicon-containing alloy, and a tin-containing alloy,

said non-aqueous electrolyte includes an organic peroxide m-chloroperoxybenzoic acid, and is free from a monomer capable of being radical-polymerized,

said organic peroxide said m-chloroperoxybenzoic acid accounts for 0.1 to 5 % by weight of said non-aqueous electrolyte, and

said organic peroxide is at least one selected from the group consisting of hydroperoxides, peroxyketals, and ketone peroxides.

2–4. (Cancelled)

- 5. (Currently Amended) The lithium secondary battery in accordance with claim 1, wherein said organic peroxide m-chloroperoxybenzoic acid is further included in said negative electrode.
- 6. (Original) The lithium secondary battery in accordance with claim 1, wherein said negative electrode active material comprises a silicon-containing alloy.
- 7. (Original) The lithium secondary battery in accordance with claim 6, wherein said silicon-containing alloy comprises: a solid solution including silicon and at least one transition metal element selected from the group consisting of Ti, Ni, Co, Fe, and Cu; or an alloy including silicon and at least one intermetallic compound selected from the group consisting of TiSi₂, TiSi, CoSi₂, CoSi, FeSi₂, FeSi, NiSi₂, NiSi, and Cu₃Si.
- 8. (Original) The lithium secondary battery in accordance with claim 7, wherein said intermetallic compound is TiSi₂.
- 9. (Currently Amended) The lithium secondary battery in accordance with claim 1, wherein said organic peroxide m-chloroperoxybenzoic acid is further included in said positive electrode.
- 10. (Currently Amended) The lithium secondary battery in accordance with claim 5, wherein said organic peroxide m-chloroperoxybenzoic acid is further included in said positive electrode.

11. (Currently Amended) A lithium secondary battery comprising: a positive electrode including a positive electrode active material; a negative electrode including a negative electrode active material; and a non-aqueous electrolyte,

wherein said positive electrode active material comprises at least one lithium-containing composite oxide represented by the following general formula:

$$\text{Li}_{x}\text{M}^{1}_{1-y}\text{M}^{2}_{y}\text{O}_{2}$$

where M^1 and M^2 are different elements, M^1 [[is]] being Ni or Co, and M^2 [[is]] being at least one selected from Ni, Co, Mn, Mg, and Al, $1 \le x \le 1.05$ and $0 \le y \le 0.7$,

said negative electrode active material is at least one selected from the group consisting of silicon, tin, a silicon-containing alloy, and a tin-containing alloy, and

said negative electrode includes an organic peroxide, m-chloroperoxybenzoic acid
said organic peroxide is at least one selected from the group consisting of
hydroperoxides, peroxyketals, and ketone peroxides, and

said non-aqueous electrolyte is free from a monomer capable of being radical-polymerized.

12. (Currently Amended) A lithium secondary battery comprising: a positive electrode including a positive electrode active material; a negative electrode including a negative electrode active material; and a non-aqueous electrolyte,

wherein said positive electrode active material comprises at least one lithium-containing composite oxide represented by the following general formula:

$$\text{Li}_{x}\text{M}^{1}_{1-y}\text{M}^{2}_{y}\text{O}_{2}$$

where M^1 and M^2 are different elements, M^1 [is]] being Ni or Co, M^2 [[is]] being at least one selected from Ni, Co, Mn, Mg, and Al, $1 \le x \le 1.05$ and $0 \le y \le 0.7$,

said negative electrode active material is at least one selected from the group consisting of silicon, tin, a silicon-containing alloy, and a tin-containing alloy, <u>and</u>

said positive electrode includes an organic peroxide, m-chloroperoxybenzoic acid said organic peroxide is at least one selected from the group consisting of hydroperoxides, peroxyketals, and ketone peroxides, and

said non-aqueous electrolyte is free from a monomer capable of being radical-polymerized.